

What is claimed is:

1. An inflatable tower system for establishing an elevated observation platform, said system comprising:

5 an elongated inflatable envelope extending from a first envelope end to a second envelope end;

a means for maintaining said first envelope end at a fixed position relative to a ground location;

10 a means for inflating said envelope to elevate said second envelope end relative to said ground location; and

an observation means mounted on said envelope at said second envelope end.

2. A system as recited in claim 1 wherein said inflating means is a cold air blower.

15 3. A system as recited in claim 1 wherein said observation means comprises a video camera.

4. A system as recited in claim 1 further comprising a plurality of guy wires attached to said envelope for holding said envelope.

20 5. A system as recited in claim 4 wherein at least one said guy wire is attached to said envelope at said second envelope end and at least one said guy wire is attached to said envelope between said first envelope end and said second envelope end.

6. A system as recited in claim 4 wherein at least one said guy wire provides a communication link from said observation means to a ground location.

7. A system as recited in claim 6 wherein said communication link is a fiber optic communication link.

8. A system as recited in claim 1 wherein said envelope is made of UV resistant nylon cloth.

5 9. A system as recited in claim 1 wherein said envelope is substantially shaped as a truncated cone when inflated.

10. An inflatable tower system for lofting an electronic device, said system comprising:

10 an elongated inflatable envelope extending from a first envelope end to a second envelope end;

a blower for introducing air into said envelope at said first envelope end to inflate said envelope and elevate said second envelope end relative to said first envelope end; and

15 means for attaching said electronic device to said envelope at said second envelope end.

11. A system as recited in claim 10 wherein said electronic device is a video camera for producing an electronic video image and said system further comprises a communications link for transmitting said video image to a ground location.

20 12. A system as recited in claim 10 further comprising a plurality of guy wires attached to said envelope for holding said envelope.

25 13. A system as recited in claim 12 wherein at least one said guy wire is attached to said envelope at said second envelope end and at least one said guy wire is attached to said envelope between said first envelope end and said second envelope end.

14. A system as recited in claim 10 wherein said envelope is made of UV resistant nylon cloth.

15. A system as recited in claim 10 wherein said envelope is substantially shaped as a truncated cone when inflated.

5           16. A method for erecting an inflatable tower to establish an elevated observation platform, said method comprising the steps of:

          providing an elongated envelope having a first end and a second end;

          mounting an observation device on said envelope at said  
10           second end;

          folding said envelope to establish a crease at a location between said first envelope end and said second envelope end;

          introducing air into said envelope at said first envelope end to inflate said envelope between said first envelope end and said crease  
15           while simultaneously restraining said second envelope end relative to said first envelope end; and thereafter

          selectively releasing said second envelope end while simultaneously introducing air into said envelope at said first envelope end to inflate said envelope between said crease and said second  
20           envelope end to elevate said second envelope end and said observation device relative to said first envelope end.

17. A method as recited in claim 16 wherein said elongated envelope defines a longitudinal axis and said crease is oriented substantially orthogonal to said longitudinal axis.

25           18. A method as recited in claim 16 wherein said crease is a first crease and said method further comprises the step of folding said envelope to establish a second crease at a location between said first crease and said second envelope end.

19. A method as recited in claim 16 wherein said envelope is made of UV resistant nylon cloth.

20. A method as recited in claim 16 wherein said envelope is substantially shaped as a truncated cone when inflated.